ABSTRACT

A semiconductor component having a metallization system that includes a multi-metal seed layer and a method for manufacturing the semiconductor component. A layer of dielectric material is formed over a lower level interconnect. A hardmask is formed over the dielectric layer and an opening is etched through the hardmask into the dielectric layer. The opening is lined with a thin conformal barrier material. A plurality of metal oxide layers are formed over the conformal barrier material. The plurality of metal oxide layers are reduced by heat treatment to form a multi-metal seed layer. An electrically conductive material is formed over the multi-metal seed layer.